

THE ARCHITECTURAL JOURNAL

BEING THE JOURNAL OF

THE ROYAL INSTITUTE OF BRITISH ARCHITECTS

VOL. V. THIRD SERIES, 1898

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[From a recent photograph by Elliott & Fry.]

PROFESSOR AITCHISON, R.A., *President.*

Royal Gold Medallist 1898.

James Mackenzie

George Aitchison

JOURNAL

OF

THE ROYAL INSTITUTE OF BRITISH ARCHITECTS

NOVEMBER 1897—OCTOBER 1898



VOLUME V. THIRD SERIES

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1898

UNIVERSITY
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JOURNAL

OF

THE ROYAL INSTITUTE OF BRITISH ARCHITECTS

SESSION 1897-98.

THE OPENING ADDRESS. Delivered by the President, Professor AITCHISON, A.R.A.,
at the First General Meeting, Monday, 1st November 1897.

BROTHER ARCHITECTS, LADIES AND GENTLEMEN,—

WHEN I had the honour of addressing you last year, I chose a subject with which I felt sure you would all agree, as it was the recounting of some of the architectural triumphs of the past, and the pointing out of some of the services architecture has done for those nations where it flourished. These services include the usefulness of the monuments at the time they were built, the adorning of the country, and the keeping of a record of that nation's greatness, of its peculiar characteristics, and of its position in civilisation. I thought that the first utterances of a new President should be as free as possible from controversial matter; but, after a year of office, the President becomes conversant with the wants and possibilities of the Society. I now propose that we should consider how the Institute can, with a reasonable hope of success, improve the art it was specially created to cherish and advance.

The unravelling of the great problems of humanity and the extraction of the lessons they teach are beset with difficulties, and some of these difficulties are apparently insuperable on account of our ignorance of the factors. Sometimes the glimmerings of light that the most perspicacious can see turn out to be not those of the dawn, but of mere will-o'-the-wisps, as in the case of Machiavelli's works. Machiavelli saw exactly what men did, and was not led astray by what they ought to do; and in the problems he set, he saw the solutions wanted; but, misled by the ruthlessness of Nature, he overlooked the supreme importance of how the end was attained; so that the old adage "Let justice be done though everything perish" is a more useful maxim for mankind to follow than to attain its object by wickedness.

We cannot suppose that among the two parties who alternately govern us, and help to mould our minds, to direct our aims, and to modify our desires, there are not on both sides upright and devoted men, whose views are as the poles asunder; and it is only by long experience that the value of the measures carried can be judged of.

At the time of the discussion of such measures the partisans of the scheme are as sure of its excellent results as their opponents are of its pernicious effects; and as the clashing of the opposing views causes heated, angry, and acrimonious debates, so I fear that suggestions of improvement may have the same effect amongst us.

In considering architecture, as in considering every other transcendental pursuit, we must take the existence of two things into account—namely, the set of the public mind and the occurrence of genius; and though we most urgently want genius in every branch of skill and knowledge, we have not the faintest notion of the causes of its production. The utmost we can do is to offer it ample opportunities of learning what it wants to learn, and to bestow our thanks and admiration upon its possessor and his works.

The other cause of excellence is the set of the public mind in a certain direction; but why it sets in that direction is at present unfathomable, though we may roughly indicate that its set is always towards those pursuits that promise power, wealth, and delight. We may, however, say with certainty that in this age it does not set in the direction of architecture. If the genius of all the great architects that ever lived were combined in one, and that one had the chance of showing it, the architecture that he would produce would have little or no effect on the public, for the public now gets more, in that direction, than it either desires or deserves almost for nothing, and is perfectly ungrateful. The set of the public mind is so important a factor that we can hardly overestimate its importance. Men whose turn of mind is in the line of that of the public generally decry all attempts at systematic teaching, and proclaim that all schools and universities are mere shoddy-making factories that turn out a colourable imitation from waste.

When in the past there has been a sudden demand by a city or a nation for some kind of knowledge or skill of which there was a deficient supply, the head of that nation or city had no better remedy to offer than the creation of schools, academies, and universities, where the requisite knowledge and skill should be taught or tested, and where it was hoped they might be learned. This was the method adopted by Constantine the Great when he chose Byzantium for the capital of the Roman Empire, and caused to be built there copies of the Senators' houses in Rome, and of their villas in other parts of Italy. We know that in his time the art of sculpture had so declined that the statues and bas-reliefs had to be taken from Trajan's Forum to form the adornments of his own triumphal arch, and that the sense of propriety had so decayed that there was no outcry against such folly; and though there was then a large influx of architects and skilled workmen into Byzantium, the work was so hastily and so unskilfully done that eighty domes are said to have fallen during his lifetime, and many buildings had to be pulled down in the time of his successors. So apparent was the want of competent architects and skilled workmen that he offered a premium to those who would have their sons brought up as architects, and to skilled workmen who would bring up their sons to their own trades. With this object he started schools in Italy and North Africa. May we not say that Santa Sophia, one of the masterpieces of the world, was the outcome of this teaching?

After the irruption of the barbarians in the West there was a great want of both architects and skilled workmen, and the ecclesiastical authorities endeavoured to supply that want by founding schools in their abbeys and monasteries. Again, at the time of the Saracen irruption there was a dearth of architects and skilled workmen; for these energetic savages came at once from poverty into fabulous wealth, and wanted mosques for their new religion, and palaces for their Kalifs, Sultans, and great men; and this want was tried to be met by schools and universities connected with the mosques: and there was again the same want in the days of Charlemagne, and to meet these wants the same methods were adopted. I fancy that all the systems but one offered teaching to all who came, and, I presume, who showed some aptitude; but Constantine, who was certainly an able man, only offered his premiums for learning architecture to young men of eighteen years of age who had received a liberal education—whatever that meant then, or may mean now.

Looking at the enormous extent of the knowledge required by an architect, and the

almost antagonistic powers of mind required, would it not be better to confine architectural teaching to architecture?

As architecture is pre-eminently a constructive art, construction should certainly be its foundation—the very last thing that would be thought of now, for the æsthetic architect would leave that to the builder and the engineer. It seems ludicrous not to insist on an architect who is to build having such knowledge of statics as to know the proper method of resisting the force of wind, of water, and of earth, and the thrusts of arches, vaults, and domes. Statics would give us, too, important lessons in æsthetics, for it gives us the proper proportions of each part of a building when we know the height, the weight to be carried, and the strength of the material to be used. When these particulars are known and provided for, we may roughly say that we have only to accentuate the important part by mouldings, or have them adorned by the sculptor to make it into architecture.

The architectural student wants also to know how to plan conveniently and beautifully, to make his building wholesome, and finally to give it the shapes and ornaments that proclaim its destination, and are appropriate to that destination, and “all the rest is leather and prunello.” The literary, goldsmithing, painting, and modelling architects of the Renaissance left us one pernicious legacy, for their aim was to imitate Roman architecture, and from their teaching the Gothic revivalists have wanted to imitate Gothic, and the Greek revivalists have wanted to imitate Greek, though the Italian Renaissance architects gave grace and artistic perfection to their Roman models.

This procedure of imitating the construction and æsthetic expression of a Pagan people who flourished 1,200 years before the Renaissance seems to me to be a mistaken one, for architecture is a progressive art, not only in the scientific part of construction, in the increase of material wants and the introduction of new materials, but also in the æsthetic part; for no two successive generations like exactly the same forms, nor are the emotions that should be raised exactly alike. You certainly should not ignore the advances made in the architecture of the immediate past. Between the Pagans of Ancient Rome and the Renaissance there had been Christian Roman architecture, the Byzantine, when the dome took so prominent a part; there had been Romanesque and Saracen architecture; there had been Gothic, which abandoned the opposing of inert mass to thrusts, and used counterpoise, and showed a constructive skill never equalled till this age of iron; Gothic, too, had tried to express in its churches its ideals of Knighthood and of Roman Catholic Christianity. It was certainly not wise to ignore former advances in construction, and it was hardly possible to go back to pure Roman Paganism, however hard the Renaissance men tried. If we want to advance we must follow the example of the medievals; we must study deeply, observe accurately, reason logically, and be never deterred by failure, and endeavour to express the leading character of our time, which, I fancy, is the getting an insight into Nature's laws and applying them to our own wants. We must, too, endeavour to discover what in the heavens above, the earth beneath, or the waters under the earth we and our employers love to see embodied in our works, and how that embodiment should be expressed.

In England we have artificially divided the constant increase of skill and knowledge, and the fluctuation in taste of the Gothic architects, into styles which we call “Early English,” “Geometric,” “Decorated,” and “Perpendicular.” I want you to observe that these so-called styles were gradual developments. The first Gothic architects developed the mouldings of the Romanesque; the grouping of two or more lancet windows under an arch suggested a hole in the spandrel afterwards cusped with the new Saracen feature, and so on; and as skill increased and taste decayed the tracery of the enormous perpendicular window grew mechanical and ugly. It is only by increase of æsthetical and constructive knowledge and the development

of necessary features that any characteristic features of our own can be stamped on our architecture.

When a race has had enough wit to invent mouldings on which the sunshine of its own country played the harmonies that it loved, how can these mouldings be transplanted into another country, with a different atmosphere and a different sunshine, and produce the same effect? And if they could, are these the precise effects we want to produce now?

Any one who can appreciate the beauty of mouldings, and has seen Greek architecture at Athens, cannot fail to observe how absolutely ineffective these mouldings are in the misty atmosphere of London, particularly when there is no sunshine. The only other architects who understood the art of moulding were those of the Middle Ages, after what we call Gothic was developed: their mouldings are perfectly effective in misty weather, but are too coarse and hard when there is full sunshine, while they are at all times wanting in grace. Yet I may say that the art of moulding is as much neglected now as the science of statics.

No one can give genius, nor does it seem in one man's power to turn the desires of mankind in the direction he desires. You can, however, try to drive away from the profession, by a thorough examination, all those who do not love architecture better than anything else; and though this love does not always ensure the possession of genius, it mostly does. Having got the proper sort of men, you can see that they have that necessary knowledge and skill that would enable them to use the divine spark properly if they have it.

Ben Jonson repeats Horace's adage that "the poet is born and not made"; but he adds, for all that, a poet wants a good deal of making—and it is the same in all the fine arts. In painting and in sculpture the student with a passion for either does not come fully armed, like Athené from Zeus' brain; anatomy has to be laboriously acquired, as well as the power of drawing or modelling the perfect human form; the art of composition has to be learned, as well as what sculpture and painting can properly represent. Architects are not born with a knowledge of statics, nor of the strength of materials, nor of the art of planning, nor of how to express the emotions that each particular structure should evoke; though we now see ornaments from the palaces of the Cæsars, or from the boudoirs of Renaissance beauties, lavished on tailors' or oyster shops and on banks and insurance offices. I have seen the ghastly ornaments of Roman temples, bullocks' skulls, on a bank, but I looked on these as the symbol of the architect.

The Institute is a university—*i.e.* it does not teach but it examines, and informs students what they should know and where some of this information can be got. Amongst some the idea of teaching is almost a mania, and I admit that some things must be taught: the pronunciation of foreign tongues, the use of a foil or an oar; but, as far as I know, the art of teaching is mainly non-existent. My experience of school teaching is this: I was put under a man who had mastered the subject I had to learn, and who was armed with a stick. He told me to learn a piece out of a book, and he allowed me what he thought was enough time to learn it in. If I did not know it, I was soundly beaten, and without doubt this is a great stimulus to exertion. Lucian, of the Dialogues, was supposed to have a taste for sculpture, but his master thought he had not striven enough, and as he had broken a piece of marble, too, gave him so severe a beating that he abandoned the art.

Unfortunately no real text-book has been written on architecture, though all but how to produce the emotions proper to any structure may be picked up from various books. Those architects who can produce the proper emotions have something else to do than to explain the means they employ, even if they could explain them. And the knowledge, too, of the means used to produce emotions will not give the power to produce them, or else all the real critics of aesthetics would be poets, painters, sculptors, architects, or musical composers as well. You

cannot suppose that those artists who have excited emotions have not tried to learn all they could from their predecessors. In the case of the poets at least we know that they have studied the works of their predecessors, and translated them when in foreign tongues, and paraphrased them when in their own; and though Horace's maxim is excellent, that "if you want to make your hearers cry, you must cry yourself," yet even when he did cry, he had to learn the precise mechanism for causing his hearers to weep. Architects must study and paraphrase those buildings and those members of buildings that have produced the proper emotions in them. An architect must also recollect that those who are to be moved by his building are not Greeks, Romans, mediævals, nor Italians of bygone ages, but the people of his own time. Still, if you can touch the master chords of humanity, they are not so very differently attuned now from what they were in the earliest times, or else we should not laugh at the wit of Aristophanes, of Rabelais, of Swift, or of Molière; nor cry over the pathos of Homer, Æschylus, Sophocles, Dante, or Shakespeare.

We can at least see that an architectural student has the knowledge that he cannot properly do without, and we shall find this alone will have a very good effect on the profession; but it is almost impossible to divest men's minds of cant. The student is asked to know all sorts of things, some of which are interesting, some pleasant, and some dull, that have no bearing on architecture. It is interesting enough to know that hazel-nuts were shipped at Barcelona and currants at Patras, but we use neither dry nuts nor currants in architecture; it is pleasant enough to understand Greek, Latin, Hebrew, and Sanscrit; French, Italian, German, Spanish, Portuguese, Russian, and Arabic; but they are no more architectural arts than the broad-sword exercise or being able to shoot flying. It is interesting enough to know who built the Parthenon, or the Pantheon, or King's Cross, but it is no more architecture than playing on the fiddle or dancing the polka.

We believe that Nature perfectly adapts all her living works to the actions they have to perform without waste of material; and while some are exquisitely beautiful, some majestic, and some comic, others are commonplace, and some are repulsive, hideous, or frightful; but they all have character. It is only by studying Nature's works and former buildings, and deducing laws from them, that we can hope to cultivate that sense which makes us like one form and detest another; so I think that such a study is necessary for those who wish to become architects; for though a knowledge of statics will make our buildings safe and prevent a want of due ratio between the parts, we must trust to a cultivated eye, till the laws are discovered, to make them beautiful, majestic, or sublime. We should, I think, make our students first design in old-world materials, wood, brick, stone, and marble, so that their designs can be compared with the existing successful monuments; but we have new materials which have to be brought within the pale of architecture.

In my opinion we cannot do better than make students design in cast iron when they have succeeded in designing in the old-world materials. It is too expensive a material to disregard its statical conditions. It is difficult to arrange a column or a stanchion so that its capital may securely carry a heavy superstructure with a large base. It is difficult to make the base of this column or stanchion wide enough to safely transmit the weight it bears on to a foundation of much softer material; there are difficulties in the design of mouldings and floral ornament that can be cast; and there are absolutely no examples to imitate, so that the knowledge, care, skill, and invention of the student are called into play. We cannot believe that the ingenious Mediæval architects would have foregone the use of such valuable and powerful materials as wrought iron, cast iron, and steel on account of Mr. Ruskin's objection that they were not mentioned as building materials in the Bible.

It may be truly said that nothing can be effected in a structural art like architec-

ture by talking; but when a man is lost in a wood, and you can direct him to the road out of it, you have done him most effectual service. Architecture has been in a wood since the fifteenth century, and it can never progress until it gets out of this wood. The intelligent architectural student wants to know the mark he is to aim at, and how he may hit it; and I am afraid the general opinion would be that he is to learn to sketch in perspective; and when he asks what he should sketch, he would be told everything that appears to him interesting, striking, or beautiful, because when he gets into practice he will find that the public may ask him to build in any style the world has known. A good instance of the ignorant instructing the wise! He should be told that he has first to learn how to construct, and that the aim of architecture is to make of each building an organism like Nature's, fitted to fulfil its duties as perfectly as possible without waste of material, and to make it properly tell the tale of its purpose or purposes, and that if sculpture and painting can be afforded, he is to use them to tell its tale more completely.

When the Associates' curriculum is amended I would reduce the examinations to two, a matriculation examination and a final one, for two reasons: first, because time would be saved; and, secondly, so that each student might keep up the knowledge and skill he had acquired. Professor De Morgan used to say that when an examination was passed, the students thought all the knowledge required for passing it might be forgotten, and looked on his asking again for subjects they had once passed as a fraud, as if they were asked to pay a second time when they had the receipt for the first payment. The final examination should include a certificate that the candidate has acted as clerk of the works on some building for at least six months, to familiarise him with real work, and to impress on his mind that it is building and not drawing that is wanted. These amendments would greatly improve the condition of architecture; but architecture would be more improved if there were an examination for Fellows as well. The complaint is that there is a dearth of Fellows, and a proposition is made like that adopted by the giver of the Scripture feast, that we should send into the highways and by-ways and compel them to come in. There would surely be no need of compulsion if it were felt to be an advantage and an honour to be a Fellow. It has been said that eventually every Fellow must have been an Associate, but the present conditions of the Fellowship offer a way to escape examination. No one, I imagine, objects to see really distinguished architects being admitted by acclamation; but at present there are only three real qualifications for the Fellowship—that the candidate is thirty years of age, is honest, and has been seven years in practice; though it is true that the Council look at the drawings turned out of his office. Some one said of a Prime Minister in Cobbett's day that he was honest; to which Cobbett replied that no one would take a footman if honesty were his only qualification, and put this question: "Shall that be the only qualification for a Prime Minister?" No one can say that physicians or surgeons do not desire and do not strive to be Fellows of their respective colleges, or that both are not better for having learned the necessary elements of their profession. The only objection to a proper examination of Fellows is that it is absurd to expect it from men of thirty years of age who have been seven years in practice. The physicians and surgeons saw the force of this; and though the examination may take place at twenty-one years of age, the title cannot be assumed until they are twenty-five. The Fellows' examination should only be more complete than that of the Associates; and the candidate should have a certificate of having acted as a clerk of the works for a year, and made out the necessary full-size diagrams for the work on the floor.

I have only one remark to make before I give my peroration. I am rather surprised that architects do not see that degrees of excellence are possible in architecture; or, if they do see it, that they do not act on their convictions. The greatest living architects are contented

with the same remuneration for their work as the apprentice just out of his time, and merely seek to get into a wholesale business. This greatly helps to degrade the profession in the eyes of the public, and gives a very wrong impression of the facts, as every architect well knows. Thousands of public monuments have been erected in Europe since the Golden Age of Greece, not to speak of important private buildings; yet the Parthenon and the Caryatid Temple on the Erechtheion have never been equalled since, nor the interior of the Pantheon, nor the west front of Notre-Dame at Paris, nor the Cornaro-Spinelli Palace, nor the Scuola di San Marco, nor the Town Hall of Brescia.

In all the other fine arts the first successful effort brings its author next to nothing, but those produced in the height of his skill and knowledge mostly bring him wealth, if that be his desire. The great Diogenes was a beggar, and Jean François Millet, the one artist in Europe according to the Japanese, was in poverty; and so was Alfred Stevens. Every architect knows that in the case of architectural works of moderate size it is a question if he is to gain or lose a five-pound note; and the more care he takes, the more certainly is the balance on the wrong side. The fashionable architect with a hundred buildings has a difficulty in persuading the profession or the public that he bestows the same loving care on each of his hundred buildings that he would do if he had only two, and is apt to provoke the retort of the lioness to the beasts in *Æsop's Fables*. "There was a great stir made among all the beasts, which could boast of the largest family. So they came to the lioness: 'And how many,' said they, 'do you have at a birth?' 'One,' said she grimly; 'but that one is a lion.'"

I cannot help desiring to see the pursuit of architecture followed on sound principles, nor can I forget the absence of any system in my youth; for then, after you had drawn out examples of the Greek and Roman orders, genius was supposed to do the rest. I am delighted at the admiration of our smaller domestic architecture by our great morning newspaper, *The Times*, and by M. Paul Sédille in his *L'Architecture Moderne en Angleterre*; but I wish to see that admiration extended to our great public buildings as well.

One sees to what lengths a proper architectural education may lead from mere savagery in the architectural triumphs of the Middle Ages. If the true architectural high road could be again found all might hasten to the goal, and not be like the dragon's teeth when the stones were thrown into the middle of them. Who knows that in the case of the right road being found the public might not again take a passionate interest in the excellence of our art, as it must have done at the great epochs? Modesty is a charming virtue in all, and especially in those of great intellectual endowments; but if this modesty is only to make us idle and worthless, let us throw it off. Let us no longer say we are so inferior to the ancient Greek, Roman, Byzantine, Saracen, Mediæval, and Renaissance architects that it is no use trying to equal them. Have we relinquished the courage, daring, and self-reliance that once distinguished our race? If we have we must be contented to lag behind the rest of the world. If we are not equal to former races, and particularly to the Romans we so much resemble, I believe it is because we have got into a wrong road, and I would rather see architects take up the position of our Ambassador at the Court of the father of Frederick the Great than be ready to confess that the English are hopelessly inferior to the great architectural races. Frederick William, as you know, had a regiment of giants, and paraded them in front of our Ambassador, and asked him if he thought an equal number of Englishmen could beat them. The Ambassador said he could not say that, but he would undertake that half the number would try. I hope we are not worse than the men of Milton's days, and hear what he says of them: "Lords and commons of England! consider what nation it is whereof ye are, and whereof ye are the governors: a nation not slow and dull, but of a quick, ingenious, and piercing spirit; acute to invent, subtle and sinewy to discourse, not beneath the reach of any

point the highest that human capacity can soar to. Therefore the studies of learning in her deepest sciences have been so ancient, and so eminent among us, that writers of good antiquity and able judgment have been persuaded that even the school of Pythagoras, and the Persian wisdom, took beginning from the old philosophy of this island. And that wise and civil Roman, Julius Agricola, who governed once here for Cæsar, preferred the natural wits of Britain before the laboured studies of the French."

I firmly believe that the race has not degraded, and that if we will only again take up the right way of learning we shall astonish ourselves and the world. May I not say—

"Men, my brothers, men the workers, ever reaping something new:
That which they have done but earnest of the things that they shall do:?"

To those who are not architects I may say that if you will devote yourselves solely to money-making and feasting, architecture which mirrors the condition of nations at the time it is executed will certainly languish; for the admiration it should excite and the gratitude it should call forth is the very breath of its nostrils. It cannot, however, be said of the nation now that it is without aspirations, for there never was a time when so many were striving to penetrate the secrets of Nature, and the past acts and thoughts of man, and trying to yoke the powers of Nature for man's use, and to teach and elevate their fellow-man and his helpmeet. To women more liberty has been granted than Mary Wollstonecraft asked for, and they have achieved even more than she hoped for. But all these studies and pursuits rather throw our contemporaries off those primary delights that Nature gave to raise, to solace, and to purify mankind—I mean the beauties of form and colour and the impressiveness of light and shade. But if these lessons be neglected, we shall leave behind us but a poor account of ourselves in those arts which strike the eye and impress the imagination. We have, too, unfortunately abandoned the symbolic, the emblematic, and the allegorical, so that we can tell no story to the eye by which the multitude may be impressed. It is foolishly believed that a paragraph in a newspaper or in an Act of Parliament will tell the same story and make the same impression on the multitude that can be made by a fine building adorned with storied and allegorical sculpture, and painting such as we see in the Arch of Titus or Severus. The Jubilee procession, poor as it was as compared with Mantegna's "Triumph of Julius Cæsar," told more of our power and extent of empire than all the history that has been written in this century. Recollect what an obtrusive art architecture is, and how strongly it forces itself on the attention; how long it lasts, and how it forces people to come to see it in its own country. If you would only think that it is the history of the present power and cultivation of the people, you would at least learn enough about architecture to be able to judge of its excellence as you do about the other fine arts you love, and to be as proud of its excellence and as delighted with it as you are with the pictures, statues, poetry, romances, and musical compositions of the day; and when you do take the same interest in it you will certainly have your reward.

VOTE OF THANKS TO THE PRESIDENT.

Mr. H. HEATHCOTE STATHAM [F].—Ladies and Gentlemen, in rising to propose a vote of thanks to the President for his Address, perhaps I may suitably address myself rather to the House than to the Chair, and I am sure I shall carry the House with me in saying that it is very seldom that we have listened to a Presidential Address from this Chair which contains so much weighty and important thought upon the art and profession of architecture comprised in such comparatively short limits. It appears to me that the Address

has in view two main objects: it touches upon what this Institute can do, and it touches in the broader sense upon what can be expected and what can be done by modern architecture. In regard to what the Institute can do, the President puts very strikingly the true object of the examination of architects, as to the value and use of which there has been a good deal of controversy; but he puts the Examinations as having rather a preventive value. We do not want people in the profession of architecture who do not care for it, and do not

wish to do the best with it; we are sentinels to drive such away, and to keep with us those who really love it and mean to put the best of their hearts into it. Then the President refers to what a student of architecture is advised to do—to sketch in perspective, and sketch everything that is beautiful. That reminds me of a feeling I have often had that a good deal of the practice of sketching as it is carried on by an architectural student is not without its danger—that is to say, that if you come to sketching everything you see, you get a sort of love for it, and you get a passion for introducing it somewhere; and, as the President says, the public wanting you to introduce every known style, you fill your pocket-book with sketches of every style. I would suggest that the measuring and drawing out of ancient construction is a far more important training to young architects than the sketching of exteriors of ancient buildings, and more likely to lead them in the right way. With regard to the difficult subject of the Fellowship of the Institute, my own sympathy is with the opinion of the President, but I cannot conceal from myself the other argument, that this is to some extent a professional society for assisting each other's interests where it is right; and I think it is a point which cannot be disposed of in a moment. With regard to architectural education, the President seemed to cast a slur upon the literary part of the Examinations when he said it was very well to know a number of languages, but they are not architecture. No, they are not; but it is just as well an architect should not write that his building is designed in the style of the fourteenth "centuary," which I have had twice from architects in large practice. Architects should be a well-educated body; they are then more likely to be regarded with respect by the public. Coming to the larger question, what architecture is and how we can improve it, there are one or two points upon which I do not quite feel with the President. In regard to the matter of statics, which will give us important lessons as to the height of a building, the weight to be carried, the kind of material to be used, and that we have only to accentuate the important parts by moulding, &c., so as to make it effective—I would ask, Is not the plan of a building the central idea, after all? Is not that part of the artistic idea? We have, I think, a very fine example of that in what I have always considered to be our greatest modern building—namely, the Houses of Parliament. It is easy to say that the detail of the Houses of Parliament is only a repetition of Late Gothic detail. So it is; that is what was thought right at the time. But does not the real excellence of it consist in the grand conception of the plan and the grouping of the two towers and the central spire? I think the central idea is the plan, and that that is really a form of art just as much as the detail of the building. Then the President has always had a very strong

idea as to the importance of giving our minds to the treatment of new materials, especially iron. I should like to suggest one thing. It is a very complete way of putting it to say that the Egyptians had a granite architecture, the Greeks had a marble architecture, the Mediæval architects had a stone architecture, and we have got iron; but, after all, do not all those ancient materials—granite, marble, stone—belong to the same family? They are all natural materials. Iron cannot be put quite upon the same footing with them. It is to some extent an artificial material, artificially prepared; moreover, it has to be painted, in order to preserve it from the weather, which stone has not. Then I do not think you can get with iron anything like the broad expression that can be got from the stone materials. Try it in modern work. Suppose a client wants you to build him a mansion in the middle of his ancestral park, amid his old oak trees, and suppose you offer to build it for him in the most advanced construction of iron and concrete, do you not think you would get from your client what the people in the little comedy, *The Two Roses*, got from their patron, "a little—check," spelt the wrong way? Then, again, is iron a monumental material? We do not know that yet. I remember asking the engineer of one of the greatest iron constructions of this century how long a life he would give it. "Well," he said very cautiously, "with proper care I do not see why it should not last five centuries." Proper care meant painting it every five years, strengthening it, replacing all the loose rivets, and so on. But, after all, what is five centuries to architecture? Look at the Pantheon, look at St. Sophia, and, if you put aside the destructive work of man, you might say, look at the Parthenon: for it is only owing to the zeal of the Byzantine Christian and the bombshells of the "unspeakable Turk" that the Parthenon is not at this moment what a stage-manager would call "a practicable temple." Then when people say that these great engineering works, like the Forth Bridge, are the great modern works; that they are to this age what the cathedrals were to the fourteenth century—well, after all, though these works are striking and grand in a way, they are not built with the object of being beautiful. The cathedrals were, and that is a most important difference. I maintain that we must hold strongly to the idea that architecture, although it is based, as the President reminded us, on construction, has for its real object the producing of beauty appealing to our imagination, and that you cannot compare it in that way with works which are built from purely utilitarian motives. To come to the present day, and the chances we have of producing anything great, I sometimes think that "this so-called nineteenth century" is a little too much abused. It reminds me of a story of a Roman Catholic Bishop on a visitation. In one of the churches he went to, he thought the people looked depressed and melan-

choly, and in the privacy of the vestry he said, "Father So-and-So, do you know, I think ye curse these people too much." So I think we curse the nineteenth century too much. A century hence, I think this period will be seen to have been not a mean or small, but a very remarkable era, which has led to a great many new forms of thought, to an enormous advance in science and in a knowledge of the laws of Nature, and to have been a great literary era; but it certainly has not been a great architectural era. Perhaps we may be obliged to conclude that we cannot do everything at once; but I have no sympathy with those people, like the late William Morris (I do not speak with any disrespect of him, but he was a pessimist with regard to architecture), who keep repeating, "Architecture is dead—architecture is dead." What is the use of standing with your hands in your pockets and saying, "Architecture is dead"? Why not try to make it live? If architects would only give their minds to each problem that comes before them; if, instead of trying to lay hold of the details of some past style, they would think, "What have we got to express in this—how can we make it a symbol of something?" they would find themselves really accomplishing something, and more perhaps than they expected. In the words of the French sculptor Rude, which I quoted the other day in a communication to the JOURNAL, "*La grande chose pour un artiste, c'est de faire*"—to be producing something. And I think, if we keep that before us, if we look upon architecture as a symbolism of what we desire the building to express, instead of going to the past for symbols, and try to make out of it what we really care for ourselves, we shall be able to do something: something perhaps not so elaborate as the Renaissance of Classic or Gothic, but something which will illustrate the exhortation given by the poet:

"Oh thou sculptor, painter, poet,*
Take this lesson to thy heart;
That is best which lieth nearest,
Shape from that thy work of art."

MR. ALEX. MURRAY [H.A.], LL.D., F.S.A.: Ladies and gentlemen, in seconding the Vote of Thanks to the President, I may express the opinion of many if I say that upon the question which he has chosen for his Address, viz. "The Education of Architects," no one is better entitled to be listened to than he, with his long experience, his habit of observation and reflection, and his readiness in recognising greatness in every profession. On that part of the Address it would be presumptuous in me to speak. I have no idea of what the Associates' curriculum may be, amended or unamended. As to the final examinations, my experience is that most examinations have a tendency to be final. But the President has accom-

panied his views on the subject of education with a running commentary, sometimes entertaining, and meant to be so, as in the episode of his school-days, but mostly leading up to some general remark sentimentally expressed and deserving to be treasured. I feel sure that these remarks have struck you all. Let me recall one or two of them. "If you can touch the master chords of humanity, they are not so differently attuned now from what they were in the earliest times." Such is the reflection after advocating strenuously the study of all that is great in the past of architecture. Again: "We believe that Nature perfectly adapts all her living works to the actions they have to perform, without waste of material." How much is expressed by these words, "without waste of material," most of us, whether architects or not, know to our cost. But I think the danger of wasting material is perhaps more imminent for architects than others, because of the endless variety of the taste, or want of taste, they have to consult. Or take another instance. I find it difficult to recall to mind a more impressive statement of fact than that which occurred in a sentence at the close of the Address. "Recollect," he said, "what an obtrusive art architecture is, and how strongly it forces itself on the attention: how long it lasts, and how it forces people to come and see it in its own country." It has always been true, and never more so than now, that great architecture forces people to come and see it in its own country. A long, tedious, and expensive journey is nothing, if a sight of the Parthenon is the goal. But this readiness to admire the charms of other and older countries must bring with it the aspiration to erect in our own country works which shall, in their turn, keep alive the memory of the men of our own day. It was in urging this that the Address seemed to me most eloquent. We all know the fascination which Greek mouldings exercise on the mind of the President when they are seen in the sunshine of Greece. He has recurred to that subject to-night, observing that any one who has seen such mouldings at Athens must recognise how much they lose in our atmosphere. I do not suppose that on that account he would banish them entirely from our shores. Many of us would be sorry if that should happen; because, ineffective as Greek mouldings may be in our climate, they still retain and display much of their unique beauty. I remember one day on the Acropolis of Athens, when a fragment of egg-moulding, high up on one of the corners of the Erechtheum, struck me as if the small row of eggs had become resolved into drops of dew, the sun glancing on them with indescribable beauty. We cannot have startling effects of that kind in this country; but we can live in hope that some architect may yet find an equivalent, inspired by what he has seen in Greece.

THE PRESIDENT briefly replied.

* Longfellow would no doubt have been willing to add 'architect,' but it would not come into the metre. H.H.S.



9, CONDUIT STREET, LONDON, W., 6th November 1897.

CHRONICLE.

Papers for the Session.

1897.
Nov. 15.—Notes on Renaissance Architecture in Malta, with special reference to the Buildings of the Order of St. John. By A. S. Flower, M.A., F.S.A.
Dec. 13.—Brickwork Tests: Report on the Third Series of Experiments. By Members of the Science Standing Committee.
 1898.
Feb. 7.—The Housing of the Drama. By E. O. Sachs.
Feb. 21.—The Mediæval Campanili of Rome. By J. Tavenor Perry.
Mar. 21 { The Heraldry of Antiquity. By G. H. Birch, F.S.A.
 { Heraldic Drawing. By J. D. Craze.
Apr. 4.—Artistic Copyright. By G. Harmand, Avocat à la Cour d'Appel, Paris.
Apr. 18.—Domestic Architecture in the United States. By A. N. Paterson, M.A.
May 16.—The Libraries of the Middle Ages. By T. G. Jackson, R.A.

The Opening Meeting.

There was a very satisfactory muster of members and their friends, including several ladies, at the Opening Meeting on Monday evening. Among members present was Sir John Taylor [F.], who in the recent distribution of Jubilee honours was made a K.C.B., and whom the President took opportunity early in the proceedings of felicitating upon his new honours, and expressing the satisfaction felt by members that one of their number had been thus distinguished. The Allied Society at Sheffield was represented by their Hon. Secretary, Mr. C. J. Innocent [F.], and among the numerous visitors were Sir Philip Magnus, Mr. Humphry Ward, Dr. Garnett, Mr. J. A. Bennion, Mr. T. Armstrong (of the Science and Art Department), and Mr. H. Muthesius, architect to the German Embassy in London. The President and subsequent speakers had an attentive and interested audience, duly appreciative of the occasional touches of humour with which the Address was enlivened.

The National Photographic Record Association.

This Society "has been formed for collecting photographic records of objects and scenes of interest throughout the British Isles, with a view of depositing them in the British Museum, where they may be safely stored and be accessible to the public under proper regulations." The President is Sir J. Benjamin Stone, M.P., to whom the honour and credit of the conception are due. On the Council are distinguished representatives of the chief learned and photographic societies, the British Museum, the Natural History Museum, and the Science and Art Department. Mr. Alexander Graham [F.] is Treasurer, and Mr. George Scamell [F.] is Hon. Secretary. The following remarks, quoted from a circular letter issued by the executive, express the aim and scope of the organisation:—

The Association having been fairly launched, the elected Council appeal to those who are interested in the subject to assist in bringing together a truly National Photographic Record of all existing objects of interest, as well as scenery, life, customs, and history of the time. Well-wishers can help by becoming members of the Association, the subscription fee for which has been fixed at a small sum with the object of enlisting wide and general support.

Photographers and others can assist by contributing photographs (which must comply with the regulations set forth in the bye-laws), or by acting as Hon. Agents and Collectors in their respective localities.

The Council look for generous support from Photographic and Camera Clubs throughout the country, as well as from individual amateur photographers, who must now form a complete network of workers over the whole British Islands.

The Council also appeal to the large and important professional class of photographers for copies of rare and especially interesting pictures taken by them.

From scientists, antiquarians, and others, assistance is desired in searching among the rich stores of old and neglected negatives taken in past years which are known to exist, the identification of which gets more difficult as time passes, and also by using influence with their amateur photographic friends in inducing them to seize opportunities of recording passing events.

Others may render valuable help by purchasing pictures from dealers and presenting them to the National Collection, thus rescuing records which might otherwise be lost. In the course of the present Jubilee year there must have been many thousands of photographs taken of local celebrations, which, if brought together, would form a most valuable chapter of national history, and it may be remarked in passing that it should be borne in mind that a single picture of historical interest will always be acceptable.

In conclusion the Council wish it to be understood that there is no thought of competing or clashing with the excellent work of the same kind which is being so well done by the several County Photographic Survey Associations, such as those of Warwickshire, Worcestershire, Yorkshire, Cheshire, &c., in their commendable efforts to form local collections, but rather a hope is entertained that such useful work may be encouraged by loans being made from time to time from the National Collection, before being deposited in the British Museum, of interesting pictures from other localities for the purposes of exhibition.

It is thus obvious that the Association has embarked on a vast scheme whose importance it is

scarcely in our power to gauge. Imagination reels at the idea of such a record of the past coming to us through the ages. Yet this will be the commonplace of future generations.

The University of California.

The prospectus of an enterprise which the promoters seek to make one of the most notable in the history of architecture is to hand from San Francisco, sent by the Trustees* of the Phebe Hearst Architectural Plan of the University of California. The document invites the co-operation of architects and artists of every land and clime in the preparation of a plan for the new buildings of the University, to form "an ideal home of education."† Funds for securing the plan have been provided by a philanthropic and public-spirited lady, Mrs. Phebe A. Hearst, widow of a United States Senator. As far as space permits, extracts from the prospectus are here given:—

The purpose is to secure a plan to which all the buildings that may be needed by the University in its future growth shall conform. All the buildings that have been constructed up to the present time are to be ignored, and the grounds are to be treated as a blank space, to be filled with a single beautiful and harmonious picture, as a painter fills in his canvas.

The site comprises 245 acres of land, rising at first in a gentle and then in a bolder slope from a height of about two hundred feet above the sea level to one of over nine hundred feet. It has a superb outlook over the Bay and City of San Francisco, over the neighbouring plains and mountains, and the ocean. It is the desire of those who have charge of this enterprise to treat the grounds and buildings together, landscape gardening and architecture forming one composition, which will never need to be structurally changed in all the future history of the University. It is thought that the advantages of the site, whose bold slope will enable the entire mass of buildings to be taken in at a single *coup d'œil*, will permit the production of an effect unique in the world.

It is seldom in any age that an artist has had a chance to express his thought so freely, on so large a scale, and with such entire exemption from the influence of discordant surroundings. Here there will be at least twenty-eight buildings, all mutually related and, at the same time, entirely cut off from anything that could mar the effect of the picture. In fact, it is a city that is to be created—a City of Learning—in which there is to be no sordid or inharmonious feature. There are to be no definite limitations of cost, materials, or style. All is to be left to the unfettered discretion of the designer. He is asked to record his conception of an ideal home for a University, assuming time and resources to be unlimited. He is to plan for centuries to come. There will doubtless be developments of science in the future that will impose new duties on the University, and require alterations in the detailed arrangement of its buildings, but it is believed to be possible to secure a comprehensive plan so in harmony with the universal principles of architectural art

* The Trustees consist of the Governor of the State, Mr. James H. Budd, representing the State; Mr. J. B. Reinstein, representing the Board of Regents of the University; and Professor W. Carey Jones, representing the University.

† The University at present has 2,300 students, but in the new buildings provision must be made for 5,000.

that there will be no more necessity of remodelling its broad outlines a thousand years hence, than there would be of remodelling the Parthenon, had it come down to us complete and uninjured.

In the great works of antiquity the designer came first, and it was the business of the financier to find the money to carry out his plans. In the new building scheme of the University of California it is the intention to restore the artist and the art idea to their old pre-eminence. The architect will simply design, others must provide the cost.

About five million dollars have already been pledged for a beginning, and such a general desire to contribute has been manifested that it is thought that all the funds required will be forthcoming as fast as the work can be carried on.

While the method of obtaining the architectural plan has not been decided on in detail, it is thought that it will be done by an international *concours*, open to all the architects of the world, with an international jury of five members, who will have full charge of the *concours* and of the award of all the prizes. This *concours*, while partaking in some degree of the nature of the usual competition, will possess all the main features of an actual co-operation of the best architectural and artistic talent available for the purpose, as will be seen from the programme which has been prepared with that idea as a controlling one.

There will be two competitions, and ample prizes will be provided. Maps, casts, and photographs of the ground will be placed at various accessible points in Europe and America, for the convenience of architects desiring to enter the *concours*; and the programme thereof, prepared by Professor Guadet, of the School of Fine Arts of France, is now under consideration by the Trustees.

Copies of this programme, when issued, may be obtained by architects from the various architectural societies in America and Europe, or upon application to the Board of Trustees, at their office, 217 Sansome Street, San Francisco, California.

Additions to the Library.

Mr. H. L. Florence has supplemented his handsome gift of the first volume of Mr. Sachs' work on *Modern Opera Houses and Theatres* by the second. Mr. Sachs seems to be quite equal to his vast undertaking. The quality and interest of the earlier volume are sustained in the present work; indeed, the success of his scheme has enabled Mr. Sachs to extend its scope considerably. An illustration of the recently erected Her Majesty's Theatre is given as a frontispiece, and the Opera Houses of Paris and Vienna are amongst the most important theatres dealt with; while space is devoted to eight English theatres. The modernity of Mr. Sachs' work may be estimated by the fact that it contains examples of no theatres built earlier than 1869; the aim of the author being that he should carry on and complete the work begun by Contant. The volume contains one hundred plates and ninety-five illustrations in the text. [London: B. T. Batsford.]—*Library Construction, Architecture, Fittings, and Furniture*, by Mr. F. J. Burgoyne, which forms the second volume of the Library Series, meets a want that has been felt for some time, and meets it well. Its author is a librarian of extensive experience, and his statements have the authority of one who is familiar with the inner working of libraries and their requirements. There

are one hundred and forty-one illustrations, including many plans, and the matter is brought admirably down to date, a plan of one building, at least, being given which is still in course of erection.—Mr. Arthur S. Flower, a couple of years or so ago, in a review of *Practical Building Construction*, by Mr. J. P. Allen, predicted that a second edition would soon be called for, a prediction which has now been fulfilled. In his second edition the author has taken advantage of the opportunity of revising his text and of inserting a few additional illustrations. This work, which is designed for the use of students preparing for the Royal Institute and other examinations, has been presented by the publishers [London: Crosby Lockwood & Son].

It will be of interest to those who principally use the Loan Library to know that Millar's *Plastering* and Freeman's *Sketches of Travel in Normandy and Maine* may now be obtained, and that copies of Parker's *Introduction to the Study of Gothic Architecture* have been transferred from the Reference Department. The numerous books which formed part of the White Bequest, and which were placed in the Loan Collection, are now also available for borrowers.

HER MAJESTY the Queen has been graciously pleased to bestow the Royal Jubilee Medal upon Professor Aitchison, A.R.A., the President of the Royal Institute.

An erroneous statement of the death of Señor Belmás [*Hon. Corr. Memb.*], of Madrid, occurs in the new *KALENDAR* (p. 129). Señor Belmás himself writes that he is alive, "in good health, and that the Institute can still dispose of the services of its Hon. Corr. Member since 1882."

NOTES, QUERIES, AND REPLIES.

A Relic of Sir Christopher Wren.

From J. D. CRACE [*H.A.*].—

A few months ago I expressed my intention to the Literature Committee to give to the Institute an interesting letter of Sir Christopher Wren's. At the time I could not put my hand on it; but I have recently found it, and now have the pleasure to keep my promise.

The letter is interesting because it refers to his two greatest works, St. Paul's and Greenwich Hospital. It is not sufficiently known that the latter work was undertaken by Wren without emolument. The letter is unfortunately not dated; but there is, I think, fair evidence that it was written in the autumn of 1700 or 1701—Wren's design was submitted in 1698—and the Hall was roofed in, and the dome finished by August 1703.

I am not quite sure whether the "Mr. Vanbruck" to whom the letter is addressed was the famous architect of Blenheim. He was appointed surveyor to Greenwich Hospital in George I.'s

time, and may have held some subordinate position earlier.

A signature of Sir John Vanbrugh is attached to the paper on which the letter is mounted. The letter itself was rescued by my father from a mass of documents in Greenwich Hospital ordered for destruction some time about 1840 to 1845.

* * * This interesting relic, thus kindly presented by Mr. Crace, the Council have ordered to be framed and preserved in the Library. The following is an exact copy:—

MR. VANBRUCK,—

I desire you to excuse me to the Commissioners to day. His Grace of Canterbury hath appointed a Commission at Pauls this morning the same Hour; from w^{ch} I cannot be excused. The best businesse wherin the Commission of the Fabric of Greenwich can employ their time, is to consult of mony; this at present is the only necessary thing; if this can be speedily had, the works will proceed I hope to a covering, if otherwise it is better to cover up the walls before frost & snow: & if against Spring mony be got into the Treasurers hands before hande, wee shall make the better bargains & finish sooner then wee can by running in Debt

Your affectionate freind

& servant

CHR. WREN.

Fryday morne.

The Ownership of Drawings.

From F. WARREN [*A.*].—

In his interesting review of Messrs. Macassey & Strahan's book on *The Law relating to Architects*, &c., in the *JOURNAL*, No. 19, Professor Kerr states that the authors approve the law as laid down by the Courts that "the drawings belong to the Employer." The question, however, has arisen: *When do the drawings (and what drawings) become the property of the employer? At what period can he claim them? Surely until a contract is completed drawings are the architect's tools. Presumably the claim is limited to contract signed drawings; or can the employer claim all details supplied to the builder as the work proceeds? Can he claim them (a) the moment the contract is signed, or (b) when it is completed, or (c) at any intermediate point or period? Again, granted that the employer cannot demand the drawings until the completion of the contract, is he legally entitled to demand copies of drawings while the works are in progress, or is an architect legally justified in declining to give them?*

Professor KERR [*F.*], to whom an advance proof of the above was submitted, writes:—These are questions for a lawyer; and he would very likely decline to give us anything like conclusive answers; but amongst ourselves, a practical man of experience would probably advise an enquirer to act on the following assumptions:—(1) that all drawings of a practical character prepared in consideration of payment, or a promise to pay, are

the property of the payor, even from the very commencement of their preparation; (2) that to call them "tools," or the like, only implies that in this kind of business, as in so many others, the tools are supplied by the master, who can at any time claim possession of them, even foolishly, subject perhaps to the law of lien, and of course to the law of responsibility; but (3) that any superfluous drawings are not the property of the ordinary payor, except in so far as he may possibly raise a question of copyright. After all, however, it is the good fortune of architects that such questions do not arise in the ordinary course of their business.

* * Useful reference may be made to an essay on this subject by the late John W. Papworth, published in the *JOURNAL*, Vol. I., 3rd ser., p. 187.

REVIEWS. LX.

(165)

CHESTER CATHEDRAL.

The Cathedral Church of Chester: a Description of the Fabric and a brief History of the Episcopal See. By Charles Hiatt. 80. Lond. 1897. Price 1s. 6d. [George Bell & Sons, York Street, Covent Garden, W.C.]

Of all the tasks which an architect may undertake, perhaps none can be at once so interesting,

the architect not only thorough knowledge of the history of the edifice and of its architecture, together with high constructive skill and artistic judgment and appreciation, but also *imagination*, while it very strictly proscribes the play of taste or fancy beyond certain narrow limits; and when the task is completed the architectural glory reverts to the ancient architects, while the modern renovator has all the blame, of which there is generally more than enough from many critics.

The vanity and human nature of the restoring architect make him chafe at these hard conditions, which his fondness for fame disables him too often from faithfully fulfilling. He forgets that, as a restorer, the true gauge of his success is the degree of his self-repression. So when the visitor to a church or cathedral follows the track of the restorer he finds the personality of the latter frequently obtruded upon him, while that of the original architects is thrown into the background. To some extent this is due to historical perspective, and the restoring architect is no more to blame than is the small but near eminence in the landscape which blocks the view of the higher alps. But, after making due allowance for natural perspective, there still remains in the track of the church and cathedral restorer a deplorable excess of self-assertion, not to say self-advertisement; and



THE CATHEDRAL FROM THE WALLS. (From a photograph by Carl Norman & Co.) (By permission of the Publishers.)

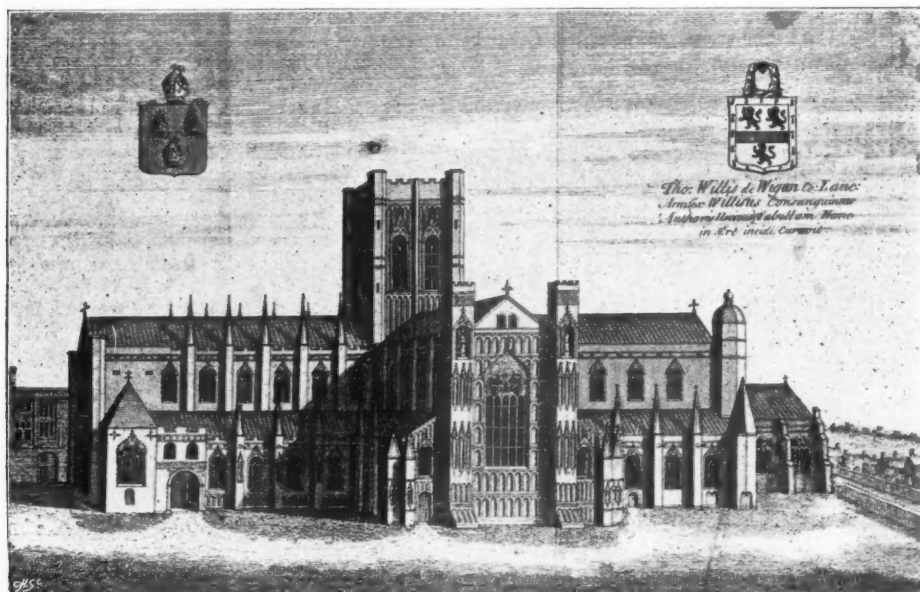
perplexing, and thankless as the restoration of an English cathedral, for such a work demands from

in some instances, where ancient buildings have been irreverently handled, it would be not too

much to say "fools have rushed in" and left their marks "where angels feared to tread."

Mr. Hiatt's choice and compact little volume tells, as plainly as could be told in such small compass, how Chester Cathedral has fared at the hands of the restorers, amongst whom Sir George

studying the admirable illustrations which enrich Mr. Hiatt's pages of what the cathedral was, as well as of what it is, it becomes apparent that by discarding the old Perpendicular lady-chapel with its low-pitched roof for the steep-pitched roof of the new lady-chapel, Sir Gilbert Scott not only



THE CATHEDRAL AT THE END OF THE SEVENTEENTH CENTURY. (From an old engraving.)

Gilbert Scott towers, like a veritable son of Kish, head and shoulders above the rest.

Mr. Hiatt casts no reflections upon Sir Gilbert, but contents himself by stating that he "of course treated the church to his usual policy of 'thorough'"; and this statement many readers will endorse, together with any subacid flavour which attaches to it by the author's intention or not.

If Dean Howson, the zealous and scholarly mainspring of the restoration movement, had desired a new cathedral for Chester, he probably could not have appealed to a fitter architect than Scott. But it is, to say the least, possible that, instead of Scott, a less popular but not less archaeologically learned nor less reliable architect could have been appointed, who, with greater reverence for the Perpendicular Gothic than Scott possessed, and with more leisure if not more humility, would have restored Chester Cathedral more successfully.

Mr. Hiatt writes admiringly of the lady-chapel as a specimen of Sir Gilbert's Early English Gothic, and every one must admit that, considered by itself apart, it is indeed a beautiful building. But in

compelled himself to avoid blocking the great east window of the choir by awkwardly hipping the lady-chapel roof, but he dwarfed the effect of the central tower by increasing the height of the lady-chapel as well as by the huge pinnacles on the east gable of the choir. And the turrets which he added to the central tower itself rather aid than diminish the dwarfing of the effect of the tower. It is true the addition of the proposed grand spire to the central tower would greatly reduce the force of these reflections on Sir Gilbert's work; but in the meantime they certainly hold good, and centuries may elapse before the spire is added.

Any one comparing the present cathedral restored, as shown by the photograph frontispiece of Mr. Hiatt's book, with the cathedral as it was before the restoration, as shown by the reproductions of old drawings which our author supplies, must perceive that the unrestored building in its simple bareness was much more dignified, though less ornate in its effect, than the cathedral as it now stands. And the central tower in particular is seen by this comparison to have suffered greatly in loss of that impressive preponderance over the

lower masses of the structure which it formerly possessed.

The best friends of Chester Cathedral, and of Sir Gilbert Scott, must ardently desire that the great spire may be added to the central tower at no distant date, and that the western towers may be simultaneously built; so that the reproach of this cathedral, as an architectural composition, may be soon and permanently removed.

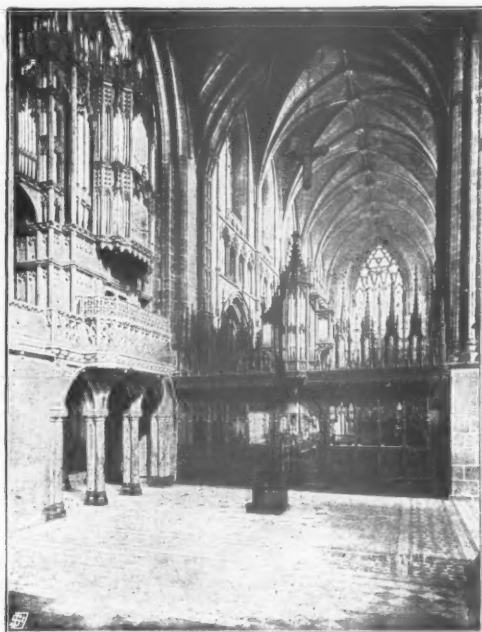
Mr. Hiatt does not explain how Sir Gilbert Scott, and Dean Howson, who supported his plans, justified the adoption of the present style and height of the lady-chapel. But he appears to

celebrated extremists amongst his contemporary church architects—in danger of “catching on” just about the time when the Chester Cathedral restoration was being commenced. At or about that same time many of our English Gothicists were beginning to feel English Gothic tasting a little stale (though it had been reborn only a generation before), and were showing a strong *penchant* for the Gothic of Normandy; and it is noteworthy that in justification of his extinguisher-roof Scott quotes similar ones in Northern France.

There never was a time, since Edward the Confessor, when some one architectural fashion or other was not “all the rage” in this country. But in the procession of variations of architectural fashion during the Middle Ages there was a grandly massive deliberateness, a solemn slowness of sequence, a continuous development of gigantic progress in artistic construction, strongly contrasting with the peripatetic freakishness, the feeble fickleness, and the remarkable lack of steady persistence in the tendencies of architectural fashion during the long splendour of Queen Victoria's reign. While Sir Charles Barry and others yielded more or less to this modern spirit of trifling with architectural styles, now coquetting with Italian and now flirting with Gothic, Sir Gilbert Scott maintained a splendidly steadfast course as a Gothicist pure and simple; and from his great eminence, and equally great consistency, he came to be regarded as the champion and leader of the reborn English Gothic School. Then came his surrender to “the powers that be” in Parliament Street, when, to please the Minister of State, he substituted his Classic for his Gothic façade of the Foreign and Colonial Offices, thus weakly becoming guilty of what his Gothic *confrères* have ever since regarded as “the great betrayal.” He seems by this time to have had so vast an extent of work that he was compelled to trust very largely to his staff, who were less proof against the flippant influences of rapidly veering fashions than he himself was; and in this way things were sometimes done in his name which were really foreign to his own tastes. But this explanation would not account for all the “thorough” features of his “restoration” (or may we not rather say his *remodelling*?) of Chester Cathedral.

Be that as it may, our author has contented himself with giving a true and painstaking account of what was actually done at Chester by this great church architect; and though he does not condemn Scott, he does not by any means flatter him as to his work there as a restorer.

While the treatment of the exterior of Chester Cathedral by the restorers is open to the general criticism that what has been gained of ornateness has been lost of sublimity, no such opinion can fairly be held of the restoration of the interior; for though, as Mr. Hiatt justly remarks, the interior of the



THE CHOIR SCREEN AND ORGAN. (From a photograph by Carl Norman & Co.)

(By permission of the Publishers.)

think an apology is due to his readers for the very singular extinguisher-like roof which these restorers added to the apsidal east end of the south aisle of the choir, and, as the author himself very wisely refrains from justifying this strange feature, he leaves Sir Gilbert to offer his own explanation, which is quoted in the book at some length. This explanation will not seem quite adequate to every one. To some it may appear rather an excuse than a justification for what they may be pardoned for ignorantly (?) regarding as a species of architectural sensationalism.

It must, however, be allowed that Sir Gilbert Scott was, as a rule, singularly free from that vice of *outré-ism* which seemed—thanks to a few

east gable of the choir, with its great window surmounting the arch of the lady-chapel, is "unsatisfactory"; and though the marble mosaics of the north aisle of the nave are, from a chromatic point of view, hardly so successful as glass mosaic would have been; and though the window glass throughout the cathedral is, save in some cases, not of high order, yet, in the interior *tout ensemble*, no false note spoils the general harmony of form and proportion, or the poetry of light and shadow of the long and lovely vista; and it must be allowed that the treatment of the great organ-case under the north transept arch, together with the organette, surmounting, as a large and handsome pinnacle, the centre of the choir-screen, is a distinct success; while the vaulting of the cathedral with oak instead of stone gives proof of the sound constructive judgment of Sir Gilbert Scott, as well as of his fine appreciation of harmony of colour between the wood and stone. It is a matter for thankfulness that at Chester Sir Gilbert did not introduce, as he did at Durham Minster, designs in Italian Gothic utterly foreign to the spirit and style of the English church builders; for however pleasing such designs may be in themselves, they become, when placed in such false positions, offensively unwelcome.

From an archaeological point of view, the most interesting part of Mr. Hiatt's volume is the latter part, wherein he describes the conventual buildings attached to the northern side of the cathedral. This portion of the book might well claim a review to itself.

Of all the excellent photographic views which enliven our author's pages, none are so exquisite as the interiors of the cathedral itself, which are fine specimens of photographic art.

In the body of the work reference is casually—much too casually—made to the fact that a man named George Marsh was tried for his life in the lady-chapel on a charge of "heresy," about the time of the Reformation, and was afterwards burnt at Boughton, near by. But while the pinnacles, arches, towers, and tombs of Chester glorify the sepulchres of nobles and priests, no monument to the memory of the martyr seems yet to have been raised by the good folks of the city whose pious ancestors burnt him. If the glory of martyrdom is of all glories the highest, a fitting memorial to the martyr of Chester would be a noble spire crowning that cathedral in which his doom was cruelly sealed, and thus surmounting, as it were, its darkest tradition by the brightness of his devotion, and so exalting good over evil.

The visitor to Chester who reads Mr. Hiatt's book must think it strange that Dean Howson, who so powerfully contributed to Conybeare and Howson's justly celebrated literary memorial of St. Paul, should have become the mainspring of the restoration of the lady-chapel of Chester Cathedral, without, so far as Mr. Hiatt gives his

readers to understand, taking any steps or making any effort to perpetuate and glorify the memory of the local martyr. This would indeed tempt such visitor to feel that martyrs as well as prophets lack appreciation in their own country. May those who are now responsible for Chester Cathedral, and jealous for its honour, take this consideration to heart!

FRANK CAWS.

Sunderland.

(166)

A PRACTICAL TREATISE ON PLASTERING.

Plastering, Plain and Decorative. A Practical Treatise on the Art and Craft of Plastering and Modelling. By William Millar, Plasterer and Modeller, with an Introductory Chapter by G. T. Robinson, F.S.A. 4s. Lond. 1897. Price 18s. [B. T. Batsford, 94, High Holborn, W.C.]

There is a good deal of what might be very well designated as "shop knowledge" which every efficient architect ought to know. Paper design is with us, and we cannot conveniently do without it; situated as we are in the perplexities of close estimating, our requirements have to be exact. To render such truly artistic, and fit to occupy any position which circumstance may suggest, experimental practice on the scaffold or in the shop seems indispensable. For to don a blouse does not involve humility, but, contrariwise, imparts a certain dignity to the artist.

To illustrate the point: an elementary acquaintance with stone cutting will reveal such difficulties and problems to be solved, that the architect will learn naturally its possibilities from the material itself, and the restrictions it places on anomalies of design. This principle applies all round, to lead, wood, plaster, and everything which has to be wrought by a skilled hand.

Now all this has a bearing on the bulky volume under notice, for its author, a practical and accomplished craftsman, is most lavish in his description of methods which will aid us considerably in doing a little daubing ourselves with the plastic materials, the possibilities of which are endless. As already indicated, knowledge obtained by personal experience will bring fresh life and interest to our drawing-boards, enabling us to produce what we want, because we know a little of the possibilities. In this way simpler, more suitable, and more desirable productions will undoubtedly result.

We are here introduced to "Plastering, Plain and Decorative," the treatment of which, from the craftsman's standpoint, is pretty nearly exhaustive. It is viewed by the author in a most comprehensive manner; for he deals with materials of all qualities and their several uses. He discusses the diminishing and working out of circular mouldings, all branches of plastering, modelling, casting and colouring, and the manufacture of compositions of the plastic trades from scagliola to terracotta and concrete, adding a rudimentary treatise

on Geometry and Architecture, tools and appliances, winding up with an appendix and a good index. What more can any emulative plasterer need? He can find everything here sorted and condensed. Intrinsic interest apart, the book in itself is a monument of research and industry, and the author is to be congratulated on having sur-

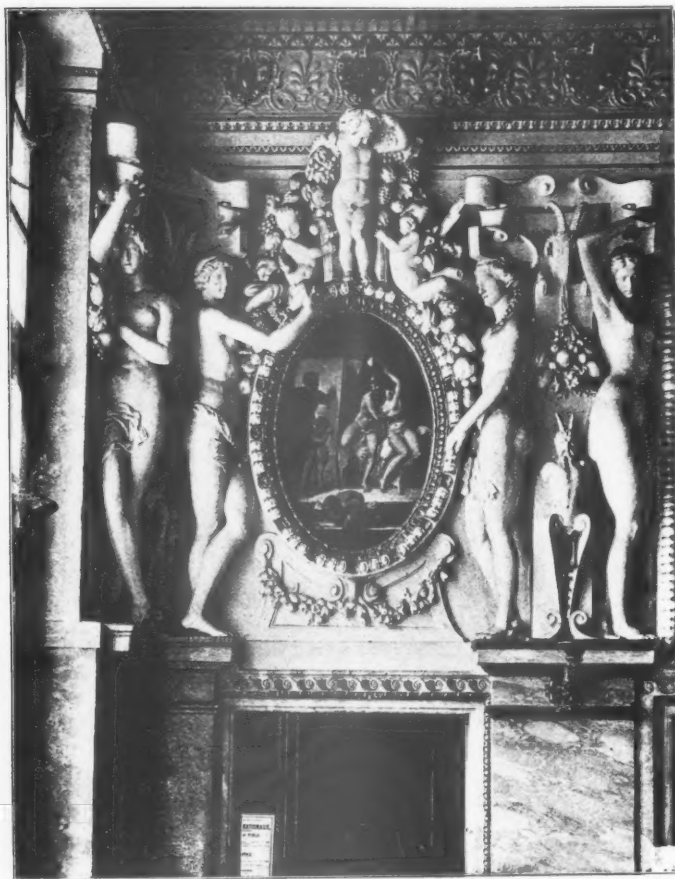
"A Glimpse of its History." This fills some twenty-three pages, and the interest Mr. Robinson arouses makes the reader wish for more.

The artistic history of plastering has yet to be written; but Mr. Millar deals with it partially in a short and terse manner. He also treats succinctly of foreign plastering—Saracenic, Indian, Moorish, Chinese, and Continental. In all of this he shows himself to be no prentice hand, but a plasterer and the son of a plasterer, a veritable child of the clay.

It is impossible adequately to notice a large work such as this, which, apart from its usefulness, contains a vast amount of generally unknown interesting information. With reference to hair, we are informed that in America ox hair is adulterated with that of the horse and goat; while in Scotland it is taken direct from the tan-yard in a wet state; also that human hair is not infrequently used in jerry-building. There are other substitutes for ordinary materials, such as sawdust, which is used instead of sand in wall plastering. There is not an architect who at one time or another has not been exercised about painting cement work. The author states that the Keene's cement, manufactured by Howe of Carlisle, is practically non-efflorescent, and later he proceeds to describe how cement work may be successfully painted:—"Caustic lime, which is not in a state of combination in cement, saponifies the oil used in painting." To obviate this, fresh white cheese and fresh slaked fat lime are added to the desired colour. This solu-

tion hardens rapidly, and is insoluble in water, a formation of albuminate of lime taking place. The proportions are three of cheese and one of lime, well mixed with the colour.

After an unusually complete and interesting account of the materials and methods of Gesso work, in which connection Mr. Millar goes to the MS. of Cennino Cennini, we are initiated into the mysteries of scagliola, a preparation which the author delights to honour, and desires to see revived. This is said to have been invented in the early part



A PIECE OF PRIMATICO'S WORK, GALLERY OF FRANÇOIS I. AT FONTAINEBLEAU.

vived and triumphed over the mishaps which have waylaid his great project.

The whole volume is carefully illustrated, and there is much of very real and practical value and suggestive help to the practising architect, in the illustrations and text, for both in description and direction the author goes fully into detail. A prefatory note comes from the pen of the late Mr. G. T. Robinson, F.S.A., who also contributes a most interesting introductory chapter to "Plastering, Plain and Decorative," headed

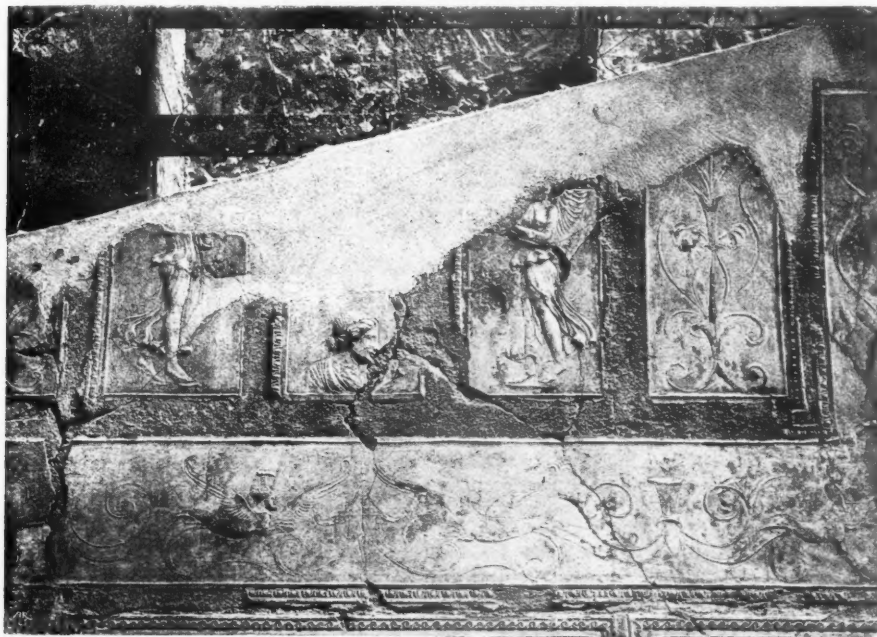
of the sixteenth century by Guido Sassi, of Cari in Lombardy; but it is more probable that he revived an ancient process.

The use of coloured plaster for imitating marbles was known to the ancients, although the pure white, or *mar-moratum opus* and *albarium opus*, mentioned by Pliny, was more used. Mr. Wilson, in the *Edinburgh New Phil. Journal*, 1811, writes: "Plastering is now carried to great perfection in Italy. The rooms are so finished that no additional work in the shape of house-painting is required, the polish of the plaster and its evenness of tint rivalling porcelain. Scagliola is the material chiefly used. At times the surface of the plaster is fluted, or various designs are executed in intaglio upon it in the most beautiful manner."

be formed of the splendour of this gorgeous apartment by conceiving a room fifty feet square with the walls, galleries, and columns rising with a richly coloured and highly polished surface.

About sixty years ago scagliola wares were sold in auction rooms, which brought the true scagliola into disrepute, and drove it from the market. Mr. Millar goes minutely into its manufacture, and there is not a marble he cannot produce to order.

Our author is the most versatile of craftsmen. During the Belt and Lawes *furor* he was engaged giving entertainments at the Theatre Royal,



STUCCO, PRESUMABLY OF THE FIRST CENTURY, FOUND NEAR THE VILLA FARNESINA, ROME, IN 1879.

Many notable buildings contain interesting specimens of scagliola: the Reform Club, St. Mary's, Islington, St. Pancras Church, St. Philip's, Regent Street, Northumberland House (now the site of the Grand Hotel), and the Albert Hall. It was used on the grand staircase at Buckingham Palace, and a range of columns in the Throne Room, some a bright scarlet, and others a rich blue in imitation of lapis lazuli.

The Duke of Sutherland's town house, originally built for the Duke of York, is rich in scagliola. The staircase walls are in giallo antique, the architraves and fluted columns supporting the roof are in granite, and the balustrade richly moulded in brocatello. Some slight idea may

Bradford, "modelling busts of the Prince of Wales, and sometimes men selected from the audience, *à la Belt*." The whole method of architectural model making is described, and the representation of varied materials by means of sand and marble dust, to say nothing of casting the parts repeated. Mr. Millar thinks that all this, if definitely designed, might enable the architect to avoid "extras and subsequent recriminations." One rather questions that suggestion.

Although the ancient examples are selected with discrimination, the volume is somewhat marred by the introduction of questionable modern specimens; a fact which makes one apprehensive



STUCCO CEILING AND WALL DECORATION, PALAZZO D'ALBRIZZA, VENICE, BY A. VITTORIO, 1560. (By permission of the Publisher.)

of its influence on the unsophisticated apprentice, whom we wish to see free from the taint of such inartistic abominations. These would haunt the memory of any young student. But where Mr. Millar keeps within the province he has so ably explored—viz. that of method—we have nothing but admiration for the thoroughness of his research.

This encyclopædic work is one for reference. To the apprentice it will prove indispensable; and a study of the past methods Mr. Millar describes will go a long way to improving craftsmanship and reviving a wellnigh lost art. For the directions relating to materials, setting out of work, and other important matters, the young architect will always be grateful to the author.

WILLIAM A. PITE.

(167)

INDIAN ARCHÆOLOGICAL SURVEY.

On the Muhammadan Architecture of Bharooh, Cambay, Dholka, Champanir, and Mahmudabad in Gujarat. By Jas. Burgess, C.I.E., LL.D., F.R.S.E., &c. Fo. Lond. and Calcutta. 1896.

This work consists of seventy-seven plates and forty-seven pages of letterpress; the preface intimates that it is the smaller of two volumes; the larger one, which is still in preparation, will deal almost exclusively with Ahmadābād, the capital of Gujarat. The two volumes when completed are intended to give a fairly comprehensive view of the Muslim architecture of the district.

Lately, in noticing Mr. Cave's work, *The Ruined Cities of Ceylon*,* I chanced to remark that if Mr. Smither's plans and sections could have been combined with the photographic reproductions, the two together would have formed a nearly perfect work on the subject. It is this happy union which we have in the volume now under consideration; and we can here study the remains almost as well as if we were on the spot. Photographs of each monument are given, from which the present condition of the structure may be seen, and the exact character of every detail in the ornamentation may be realised. Plans and sections show the arrangement as well as the constructive features; to these are added drawings of parts of importance, such as the beautiful designs of roofs, which form a special characteristic of the architecture of this part of India. This smaller volume only whets the appetite for the larger one that is promised on Ahmadābād.

The first chapter is devoted by Dr. Burgess to a very careful historical notice of Gujarat; and after reading in it the seemingly constant state of fighting that went on—murders, revolts, wars, and sieges, with the consequent destruction of towns and monuments—the marvel is that any architectural works could have been produced, or that any of them could now be found existing.

When the Emperor Jahāngir made a state visit to Gujarat in time of peace, on arriving at Ahmadābād, the capital, he ordered the buildings erected by his father, "such at least as in my eyes appeared unworthy of his memory, to be demolished;" destruction, however, was not his object, for he adds that he caused "others of greater magnificence to be erected in their stead."* If Jahāngir had tried to improve upon any of Akbar's structures in the North-West of India, the result might have been doubtful; for it was in his reign that the first incipient signs appeared of the decadence that finally ruined the Muhammadan architecture in that quarter. In Gujarat the style was different from that of Delhi and Agra, and the influences affecting it also varied; still Dr. Burgess states in the preface that it was in the seventeenth century that the decay also began there.

It is only in name that this particular architecture of Gujarat is called "Muhammadan;" in reality it is almost wholly Hindu or Jaina. We have this so very clearly defined by Fergusson that his words are worth quoting:—"Even the mosques are Hindu, or rather Jaina, in every detail; only here and there an arch is inserted, not because it was wanted constructively, but because it was a symbol of the faith, while in their tombs and palaces even this is generally wanting. The truth of the matter is, the Mahomedans had forced themselves upon the most civilised and most essentially building race at that time in India, and the Chalukyas conquered their conquerors, and forced them to adopt forms and ornaments which were superior to any the invaders knew or could have introduced."† In Western India the Muhammadans began as they did on their first arrival in India at other places; they utilised the materials of the existing Hindu or Jaina temples, of which there are two well-known examples; one at the Kutub in old Delhi, and the other being the "Arhai din ka Jhompra" at Ajmere.‡ In the Jami Masjid of Barooh, from the

* *Memoirs of the Emperor Jahanguir, written by himself.* Price's Translation, p. 117.

† *Indian and Eastern Architecture*, p. 527.

‡ Mr. W. Crook, in his lately published work on *The North-Western Provinces of India*, gives a list of places where Hindu temples have been converted into mosques. He writes:—"Thus Altamsh built the mosque at Budaun on the ruins of a Saiva shrine. The mosque at Amroha has still the old Hindu chain hanging from its roof, that at Hathgaon in Fatehpur has been built out of the ruins of four Hindu temples, and the same is the case with Mandāwar in Bijnor, Matāban and Nol Jhil in Mathura, Etāwah, Ajudhya, and many other places. In fact, when we remember that to the early Musalmāns the destruction of a Hindu shrine furnished the destroyer with a ready means of building a house for himself on earth as well as in heaven, it is wonderful that so many temples should have survived to our day" [p. 84]. One of the "Sayings" of the Prophet was:—"For him who builds a mosque for Allah, Allah will build a house in Paradise."—W. S.

large photographic reproduction of its interior given by Dr. Burgess, it is evident that the beautiful columns, with elaborate bracket capitals, are the spoil taken from an older temple; it is the same with the Tanka Masjid at Dholka, where human figures in the ornament still remain. The doorway of the same Masjid is covered with figures, and in the small niche above the door, the figure of Ganesa, the Hindu god of the door, can still be traced. A very slight amount of observation at old Delhi is sufficient to discover that when the Muslim conquerors first occupied the place and began building, they had neither architects nor artists with them of a professional character to undertake the construction of mosques or tombs; they were only an army of rude soldiers, and consequently had to employ native talent. The same conditions, it would appear, existed in Western India—the native architects and workmen were employed. It was only the plan of the Muhammadan place of worship that had to be changed. The overthrown temples supplied sufficient materials at first. Elaborately sculptured columns, capitals, and lintels existed, and had only to be erected again to suit the new arrangement. If a few new stones were required, the native workman carved them like the others he had been accustomed to produce. It can be seen in some instances that uncarved stones had been merely blocked out and inserted to raise pillars to the required height. If, at a later date, any of the Muslims had learned to become builders, the Hindus were their teachers, and they merely carried on the old manner of working; they repeated the old Hindu ornament, which may be seen in every mosque. Domes may be more plentiful in these mosques than they were in Hindu or even in Jaina temples, but they are not constructed on the arch principle—they are all on the Hindu, or horizontal, manner of construction. The elaborate designs for roofs, or ceiling panels, are illustrated in this book with many very beautiful examples; but these again are all peculiar to the pre-Muhammadan architecture of the locality.

From these statements it will be understood that although this architecture must be called "Muhammadan," for the purpose of classification, it is essentially Hindu, or Jaina, for Jainism was particularly strong in that part of Western India. The Muhammadan style of Delhi and Agra acquired a character that was perhaps more Saracenic* than it appears to have reached in Gujarat. As Delhi became the capital of India under the

Muslim rule, it may have attracted from Ghazni or Khorassan men of sufficient ability to control and change to a certain extent the methods of the native artists who were at first employed. That there were Muhammadan architects in Gujarat, Dr. Burgess produces evidence from a tablet in an old mosque at Cambay; this refers to the fourteenth century. As the inscription indicates that architects were held in considerable respect, it may be worth repeating here:—

In the reign of [this] Sultān, Zafar Khān Gustāi the architect

Built this mosque upright like royalty [sultāni];

And in the year seven hundred seventy-five from the Hijrah of Muhammad.*

The mosque has been repaired for the worship of God.

May God have mercy upon the worshippers who in this mosque

Utter from soul and heart a prayer for the architect † [p. 29].

For those who are interested in this particular style of architecture they may consult the volume itself for further details, which may be found in the numerous and well reproduced plates.

There are two subjects touched upon that have a more general interest than that of the main character of the book. These are the small tank or supply of water to be found in every mosque, and the origin of the *Mihrab*. The water is for religious ablutions, performed on entering the mosque for worship. These washings are called *Wuzū*. In a footnote Dr. Burgess explains them—that they "consist of cleaning the teeth, washing the hands, rinsing the mouth and nostrils, throwing water on the forehead, and washing the face and feet—all three times" [p. 26]. This is supposed to have been derived from the cistern or *cantharus* in the *atrium* of the early Christian basilicas of the East. This may be so, but Muhammadans are more likely to have copied the custom from the Zem-zem well at the Kaabah, where every Hadji washes away his sins. Bodily purification in connection with worship or important religious rites was common to all ancient systems; the *laver* before the Tabernacle and the Temple being well-known instances.

The *Mihrab* of a mosque is a niche in the wall indicating the direction of prayer towards Makah; it is simply a miniature apse, and Dr. Burgess accepts the theory that it was "copied or adapted by the early Musalmāns from the Christian Churches which they first seized and used as places of worship" [p. 26]. This seems so probable that it became my own conclusion long ago, and I can scarcely say that I have yet rejected the idea; but there appear to be grounds at least not to assume perfect certainty on the subject. In Ali Bey's plan of the Kaabah at Makah, a semicircular wall

* The architectural features that the Muhammadans brought from Central Asia might be more appropriately termed "Sassanian" than "Saracenic." Some evidence for this will be found in a Paper of mine on *Origin and Mutation in Indian and Eastern Architecture*, read before the Institute in April 1891. See JOURNAL, Vol. VII. N.S., p. 245, 258-60, where it is shown that the Muhammadan domes were derived from Sassanian models.—W. S.

* 1397 A.D.

† This is taken from the *Qanun-i-Islām*, pp. 72, 73.—W. S.

of a few feet in height is represented at one end of the building; within this there are two tombs, said to be those of Hagar and Ismail. Burton states that, according to one tradition, the space, which is called the *Hatym*, enclosed by this wall was formerly a part of the Kaabah, and that prayers said in it have as much virtue as if uttered within the Kaabah itself.

Now if this wall was at one time built on its present plan, for which, unfortunately, there is as yet no evidence, as a part of the Kaabah, it must have formed a perfect apse. It is to be regretted that there is so much uncertainty existing about the *Hatym*; all that can be said is, that if there had been an apse at the central shrine in Makah, it would throw a doubt upon the theory that the *Mihrab* was copied from the Christian Church.*

WILLIAM SIMPSON.

(168)

THE BRITISH SCHOOL AT ATHENS.

The Annual of the British School at Athens, Session 1895-96. Ato. Lond. [Messrs. Macmillan & Co., 29, Bedford Street, Covent Garden.]

The Annual of the British Archaeological School at Athens for the Session 1895-96 is the second publication of a series which it is hoped will be continued every year. It is intended primarily to show the subscribers to the School what is being done by the students in Greece. In this number the Report of the Committee shows that the School has not been idle, and that the students, numbering in that Session six regular students and three Associates, have made good use of their term of residence and study.

The most important part of their work—namely, the studies of the place and its valuable museums, with the help and advice of the Director—cannot of course afford material for such a publication as the Annual. What it is particularly intended to receive are short articles, especially from the students, whilst more detailed and elaborate communications will be offered as heretofore to the journal published by the Hellenic Society. These short articles are drawn from their proceedings in the line of research, which is followed concurrently with the studies at Athens by means of excavations undertaken by the School at such sites as may be chosen by the Committee, and with the permission of local authorities.

After a preliminary statement of the personal and financial position of the School, the Annual

* This is a digression from the Muhammadan architecture of Gujarat, but it is of some importance and worthy of attention. Mr. Butler, in his *Ancient Coptic Churches of Egypt*, refers to niches as being a peculiarity in most of the apses of these old churches, and mentions their resemblance to *Mihrabs*, but only says that it is a "striking coincidence." The origin of the apse in Christian Churches is one of the main points dealt with by Professor Baldwin Brown in his *From Schola to Cathedral*; perhaps he could throw some light on this subject.—W. S.

gives a short account, by Mr. Cecil Smith, the Director, of all the year's doings in Greece in pursuit of archaeology; a pursuit which has been said by Sir John Evans, in his brilliant Presidential Address to the British Association this year at Toronto, to have taken its place among the exact sciences. This account begins with the very remarkable discoveries made at Athens by the German School, under the direction of Dr. Dörpfeld, of the great water supply system of ancient Athens; important both as a valuable topographical link, and not less so in showing the perfection to which hydraulic engineering had arrived even so early as the time of Pisistratus. It is then recorded that Mr. E. Andrews, of the American School, had very satisfactorily deciphered an inscription which had once extended along the east front of the Parthenon by a careful examination of the traces of the nails which had served to attach the bronze letters forming the inscription. Mr. Andrews's achievement was admirable, but the inscription itself turned out to be of very moderate interest, and related to the emperor Nero.* At Mycenæ the Greek Ephor, K. Tsountas, has discovered a large domical tomb of the same character as the so-called Treasury of Atreus. The important discoveries at Delphi by the French School are alluded to, but have not yet been published in detail. The American School has undertaken some important excavations at Corinth; but to produce any adequate result must be the work of several years.

The British School had not been idle. An excavation at Athens itself, under the superintendence of Mr. Cecil Smith, and with the assistance of the students, appears to have established the position of the classical gymnasium called *Kynosarges* on a site far removed from the hitherto generally received theory. The grounds upon which Mr. Smith establishes its identity with the walls he has excavated are both ingenious and convincing. The chief efforts of the British School in the way of excavation were, however, displayed in the island of Melos, and this work is still in progress. The results recorded are not as yet very considerable, but are still of sufficient importance to justify their continuance. An ancient fortified gate and a remarkably fine mosaic pavement of the Græco-Roman period were the chief discoveries in the ancient capital. The site of an archaic city in another part of the island was subsequently tried, and promised interesting results, but its fuller examination was reserved for another season.

An article by Professor J. B. Bury, Associate of the School, follows that of the Director. It is on the campaign of Artemisium and Thermopylæ against the Persians. In this Professor Bury undertakes, from local and general considerations,

* A careful reduction of a portion of these traces is given in *Athenian Architecture*, Plate 22.

to correct very largely the record of Herodotus, which was compiled a good many years after the event, Herodotus being only about four years old when the battle was fought. Another Associate of the School, the Rev. A. H. Cruikshank, follows with an account of a journey to the famous mountainous monasteries of Meteora, an article well illustrated by photographs. A visit to Cyrene, contributed by Mr. Herbert Weld-Blundell, whose co-operation with the School is mentioned in the Director's report, comes next. The remains, which are very extensive, are well described and illustrated; particularly in respect to the rock-tombs, which seem to have much affinity with Egyptian tomb architecture, but at the same time have a strong Greek bias. The Greek colony by which Cyrene is said to have been founded came from the island of Thera about 631 B.C. The principal temple appears to have had the widespread echinus of the early Sicilian type of Doric. Some of the tombs exhibit Ionic capitals of an archaic form which may well have been contemporary. In the case of tomb architecture, however, the evidence of date derived from their form and fashion is not quite so clear as in that of a public building like a temple. In this sketch of Cyrene the reader will not fail to be struck with the enormous mass of available material whenever there may be a favourable opportunity for systematic examination.

The article on the prehistoric graves in Syra, by R. C. Bosanquet, student—a most energetic worker on behalf of the School—shows that in that island a number of graves were found in which the body was not stretched out at length, but was left in a crouching attitude, more nearly in a sitting posture, and similar to certain graves found by K. Tsountas near Mycenæ, and also by Professor Petrie in Egypt, and by the late Mr. Theodore Bent in the island of Antiparos. Professor Petrie has called these the tombs of the *New Race*. In some of these the bodies must have been cut into pieces before burial.

There is a very interesting article by H. M. Fletcher and S. D. Kitson, architects (whose assistance to the School operations is recorded by the Director), on the domed churches of Melos, of which there are a considerable number in the island.

The chief interest attaches to an ancient church dedicated to Christos at Kepos, near the southern coast of the island. Although we may admit that the great achievement of Anthemius in St. Sophia may not have been the earliest adaptation of the Roman cupola to ecclesiastical architecture, yet it must have set the example to the whole of the Eastern Empire, and this archaic example would seem to have been one of its first followers. It cannot indeed compare with its prototype in scale, the diameter of the dome at Constantinople being 107 ft., and that at Kepos only 10 ft. A contiguous but later church in the same style has a

font of very peculiar shape, cruciform on plan, and several others of the same character are mentioned. The simple form of the churches described in this article is well worthy of the attention of the architect.

The Annual ends with an excellent topographical study by Mr. Arthur Evans, Associate of the School, on the city of Zeus in Crete, containing the plan of part of an ancient dwelling-house which had evidently been occupied by some eminent inhabitant of the town, and recalls some of the characteristics of the archaic palaces at Tiryns, Mycenæ, and Troy.

F. C. PENROSE.

MINUTES. I.

At the First General Meeting (Ordinary) of the Session 1897-98, held Monday, 1st November 1897, at 8 p.m., Professor Aitchison, A.R.A., *President*, in the Chair, the Minutes of the Special General Meeting held 12th July 1897 [Vol. IV. p. 428] were taken as read and signed as correct.

The following Hon. Associate, attending for the first time since his election, was formally admitted and signed the Register—viz. James Lewis Thomas.

The President expressed the gratification of the Institute that one of the few distinctions accorded the architectural profession should have been conferred upon a member of their own body, Sir John Taylor [F.], who in the recent Jubilee distribution of honours had been made a K.C.B.

The following candidates for membership, found by the Council to be eligible and qualified according to the Charter and By-laws, and admitted by them to candidature, were recommended for election, namely:—As FELLOW, John James Burnet [A.], A.R.S.A., President of the Glasgow Institute of Architects (Glasgow). As ASSOCIATES, George Hastwell Grayson, B.A. Cantab. (*Probationer* 1893, *Student* 1894, *Qualified* 1896) (Liverpool); Charles Dixon Rochester (*Probationer* 1890, *Student* 1893, *Qualified* 1897) (Manchester); Arthur Joseph Singleton Shaw (*Probationer* 1891, *Student* 1893, *Qualified* 1897) (Oldham); Osgood Smith (*Probationer* 1890, *Student* 1893, *Qualified* 1897); Percy William Meredith (*Probationer* 1890, *Student* 1893, *Qualified* 1897); Harold Conybeare Trimmell (*Probationer* 1892, *Student* 1894, *Qualified* 1897); Richard Henry Ernest Hill (*Probationer* 1890, *Student* 1894, *Qualified* 1897); Percy Morris (*Probationer* 1892, *Student* 1894, *Cates Prizeman* 1897, *Qualified* 1897) (Lewes); George William Hatcher (*Qualified* 1897); Ernest William Marshall (*Probationer* 1895, *Student* 1895, *Qualified* 1897); Herbert Cyril Sinnott (*Probationer* 1890, *Student* 1893, *Qualified* 1897) (Bristol); James Henry Coram (*Probationer* 1894, *Student* 1895, *Qualified* 1897); William Stanley Bates (*Probationer* 1894, *Student* 1895, *Qualified* 1897); Samuel Sebastian Reay (*Qualified* 1897) (Bath); James Richard Fleming (*Qualified* 1897). As HON. CORR. MEMBERS, Conde De San Januario, President of the Royal Association of Portuguese Architects (Lisbon); Johan Louis Ussing, Professor at the University of Copenhagen; Settimio Fedele Gerardo Giampietri, Cavaliere of the Crown of Italy (Rome); Arnaldo Rodondo Adaes Bermudes (Lisbon).

The Opening Address of the Session having been delivered by the President, a Vote of Thanks, moved by Mr. H. Heathcote Statham [F.], and seconded by Dr. Murray [H.A.], F.S.A., was passed by acclamation, and, having been briefly acknowledged, the proceedings closed, and the Meeting separated at 9.15 p.m.

